

We Claim:

1. A method of handling a resource request, comprising:
 - receiving a resource request at a network server from a client, the
 - 5 resource request comprising a first identity of a network entity;
 - searching a database for a resource record associated with a best instance of the network entity; the best instance of the network entity being defined by the instance of the network entity that is most compatible with the resource request;
 - 10 retrieving an identifier of a series of executable instructions from the resource record; and
 - executing the series of instructions to facilitate providing the requested resource to the client by the best instance of the network entity.
- 15 2. A method according to Claim 1, wherein the resource request further comprises information relating to an operational characteristic, and the best instance of the network entity is defined by the instance of the network entity that is most compatible with the operational characteristic.
- 20 3. A method according to Claim 2, wherein executing the series of instructions further comprises:
 - analysing a set of network entities;
 - determining the network entities compatible with the resource request on the basis of the operational characteristic; and
 - 25 returning a response comprising an ordered list of compatible network entities, with the best instance of network entity first.
4. A method according to Claim 3, wherein the response further comprises information relating to the operational characteristics of the network entities.

5. A method according to Claim 2 further comprising: adding the information relating to the operational characteristic to the resource request after receiving said resource request at the network server from the client.

5 6. A method according to Claim 2, wherein the steps of receiving and searching take place at a global network server.

7. A method according to claim 6, wherein the network server is a DNS server and the step of receiving a resource request comprises receiving a request concerning access to the network entity.
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8. A method according to Claim 7, further comprising:
converting the resource request at the DNS server into a form operable by the global network server; and
15 transmitting the converted resource request to the global network server prior to the steps of searching and retrieving.

9. A method according to Claim 8, wherein the step of retrieving an identifier is implemented at the global network server.
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10. A method according to Claim 9, wherein the requested resource is provided to the client by the best instance of the network entity via the network server.

25 11. A method according to Claim 8, wherein the steps of searching a database and retrieving an identifier are implemented on a content server associated with the global server.

30 12. A method according to Claim 1, wherein the network entity is an application.

14. A method of handling a resource request, comprising:

5 receiving a resource request concerning access to a network entity from a client, said resource request comprising a first identity of the network entity and information relating to an operational characteristic;

searching a database for a resource record associated with a best instance of the network entity, the best instance of the network entity being

10 defined by the instance of the network entity that is most compatible with the operational characteristic;

retrieving an identifier of a series of executable instructions from the resource record; and

executing the series of instructions to facilitate providing the requested

15 resource to the client by the best instance of the network entity.

15. A method according to Claim 14, wherein the step of executing the series of instructions to facilitate providing the requested resource further comprises:

20 finding compatible network entities able to provide the requested resource;

comparing the information relating to the operational characteristic with corresponding operational characteristics of compatible network entities;

and

25 returning a response comprising an ordered list of network entities together with their corresponding operational characteristics, the best instance of network entity being placed first.

16. A method according to Claim 15, wherein the steps of receiving and

30 searching take place at a global network server.

17. A method according to Claim 16, wherein the network server is a DNS server and the step of receiving a resource request comprises receiving a request concerning access to the network entity.

- 5 18. A method according to Claim 17, further comprising:
converting the resource request at the DNS server in to a form
operable by the global network server; and
transmitting the converted resource request to the global network
server prior to the steps of searching and retrieving.

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19. A method according to Claim 15, wherein the resource request is a DNS record and the operational characteristic is contained within an additional DNS text field forming part of the DNS record.

- 15 20. A method according to Claim 15, wherein the response is a DNS record and the operational characteristics of the compatible network entities are contained within an additional DNS text field forming part of the DNS record.

- 20 21. A method according to Claim 14, further comprising identifying a lookup means for accessing said network entity.

22. A method according to claim 21 wherein the look up means comprises an address.

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23. A method according to Claim 21 wherein the identifying comprises retrieving a second identity of the network entity.

24. A method according to claim 23 wherein the first identity comprises a
30 name and the second identity comprises an address.

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29. An architecture according to claim 28, further comprising a content manager associated with the global network server and holding information on networks entities, said content manager configured for providing information on all known network entities able to supply the requested resource on receiving a query corresponding to the conventional resource request from the global network manager.

30. A computer readable storage medium storing instructions that, when executed by a computer, cause the computer to perform a method for handling a resource request, the method comprising;

receiving a resource request at a network server from a client, said resource request comprising a first identity of a network entity;

searching a database for a resource record associated with a best instance of said network entity; said best instance of the network entity being defined by the instance of the network entity that is most compatible with the resource request;

retrieving an identifier of a series of executable instructions from said resource record; and

executing said series of instructions to facilitate providing the requested resource to said client by said best instance of the network entity.

31. A method according to Claim 2, wherein the operational characteristic is one of: a response time of said network entity, a load on said network entity, a distance to the network entity, and a throughput of the network entity.

32. A method according to Claim 1, wherein the requested resource is available on the network entity but is not available on the network server.

33. A communications network comprising the scaleable architecture as claimed in claim 27.